



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-0527; Product Identifier 2017-NM-015-AD; Amendment 39-19215; AD 2018-05-06]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are superseding Airworthiness Directive (AD) 2016-09-12, which applied to certain The Boeing Company Model 787-8 and 787-9 airplanes.

AD 2016-09-12 required repetitive inspections of the bilge barriers located in the forward and aft cargo compartments for disengaged decompression panels, and reinstalling any disengaged panels. This AD retains the actions required by AD 2016-09-12 and requires replacing the existing decompression panels with new panels and straps, which terminates the repetitive inspections. This AD also removes airplanes from the applicability. This AD was prompted by a terminating modification developed to address the unsafe condition. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216<sup>th</sup> Street, Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0527.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0527; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216<sup>th</sup> Street, Des Moines, WA 98198-6547; phone: 206-231-3570; email: [susan.l.monroe@faa.gov](mailto:susan.l.monroe@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

##### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2016-09-12, Amendment 39-18510 (81 FR 27300, May 6, 2016)

(“AD 2016-09-12”). AD 2016-09-12 applied to certain The Boeing Company Model 787-8 and 787-9 airplanes. The NPRM published in the Federal Register on June 6, 2017 (82 FR 25983). The NPRM was prompted by a terminating modification developed to address the unsafe condition. The NPRM proposed to continue to require repetitive inspections of the bilge barriers located in the forward and aft cargo compartments for disengaged decompression panels, and reinstallation of any disengaged panels. The NPRM also proposed to require replacing the existing decompression panels with new panels and straps, which would terminate the repetitive inspections. The NPRM also proposed to remove airplanes from the applicability. We are issuing this AD to prevent decompression panels from disengaging from the bilge barriers located in the forward and aft cargo compartments. In the event of a cargo compartment fire, this condition would provide a path for smoke and Halon to enter the flight compartment and passenger cabin, which could result in the inability to contain and extinguish a fire.

#### **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA’s response to each comment.

#### **Supportive Comment**

The Air Line Pilots Association, International stated that it agrees with the intent of the NPRM.

#### **Request to Extend Compliance Time**

Japan Airlines (JAL) asked that we extend the compliance time for the replacement of the decompression panels required by paragraph (i) of the proposed AD from 22 to 48 months. JAL stated that extending this compliance time will not affect the safety level because the repetitive inspections specified by paragraph (g) of the proposed AD would still be required. JAL asked that the replacement be done during a C-check

maintenance interval, which is three years. JAL added that it would also like to add a one-year margin for airplanes on which the decompression panel is not replaced due to inevitable circumstances.

American Airlines (AAL) and United Airlines (UAL) asked that we extend the compliance time from 22 to 36 months, for the same reasons provided by JAL. AAL added that replacing the panels within 22 months would result in an undue maintenance burden on operators.

We agree to extend the compliance time for the replacement of the decompression panels from 22 to 36 months, because the repetitive inspections will maintain an acceptable margin of safety until the redesigned decompression panels are installed. This extension has been coordinated with the manufacturer. Therefore, we have extended the compliance time in paragraph (i) of this AD accordingly.

We do not agree to extend the compliance time to 48 months, which would exceed the acceptable margin of safety. A 36-month compliance time provides an adequate interval of time for replacing the decompression panels without compromising safety.

#### **Request to Include the Latest Service Information**

Boeing asked that we add Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 003, dated December 7, 2016, to the proposed AD as an alternative to using Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated November 16, 2015 (referenced in the NPRM as the appropriate source of service information for accomplishing the actions).

We agree that this final rule should refer to the latest service information. Since we issued the NPRM, Boeing has released Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 003, dated December 7, 2016. In the NPRM, we refer to Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated

November 16, 2015, as the appropriate source of service information. No additional work is necessary on airplanes on which the actions were performed before the effective date of this AD using Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated November 16, 2015. We have therefore revised paragraphs (g) and (h) of this AD to add Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 003, dated December 7, 2016, as the source of service information for accomplishing the actions. We have added paragraph (k) to this AD to specify credit for prior accomplishment of the actions specified in Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated November 16, 2015. We have redesignated subsequent paragraphs accordingly.

#### **Request to Clarify Description of “Adjustable Straps”**

Boeing asked that we change the term “adjustable straps” to “adjustable straps (zip ties)” throughout the NPRM for clarification.

We agree with the commenter’s request for the reason provided. We have changed the “Related Service Information under 1 CFR part 51” section and paragraph (i) of this AD accordingly.

#### **Conclusion**

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously, and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

## **Related Service Information under 1 CFR part 51**

We reviewed Boeing Alert Service Bulletin B787-81205-SB500008-00, Issue 001, dated December 7, 2016. This service information describes procedures for replacing the existing decompression panels with new panels and adjustable straps (zip ties).

We also reviewed Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 003, dated December 7, 2016. This service information describes procedures for repetitive inspections of the bilge barriers located in the forward and aft cargo compartments for disengaged decompression panels, and reinstalling any disengaged panels.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **Costs of Compliance**

We estimate that this AD affects 50 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Retained inspections	3 work-hours X \$85 per hour = \$255 per inspection cycle	\$0	\$255 per inspection cycle	\$12,750 per inspection cycle
New modification	7 work-hours X \$85 per hour = \$595	\$11,748	\$12,343	\$617,150

We estimate the following costs to do any necessary reinstallation required based on the results of the inspection. We have no way of determining the number of aircraft that might need this action:

### On-condition costs

Action	Labor cost	Parts cost	Cost per product
Reinstallation	1 work-hour X \$85 per hour = \$85	\$0	\$85

### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

### Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2016-09-12, Amendment 39-18510 (81 FR 27300, May 6, 2016), and adding the following new AD:

**2018-05-06 The Boeing Company:** Amendment 39-19215; Docket No. FAA-2017-0527; Product Identifier 2017-NM-015-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD replaces AD 2016-09-12, Amendment 39-18510 (81 FR 27300, May 6, 2016) (“AD 2016-09-12”).

**(c) Applicability**

This AD applies to The Boeing Company Model 787-8 and 787-9 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin B787-81205-SB500008-00, Issue 001, dated December 7, 2016.

**(d) Subject**

Air Transport Association (ATA) of America Code 25, Equipment/Furnishings.

**(e) Unsafe Condition**

This AD was prompted by a terminating modification developed to address the unsafe condition. We are issuing this AD to prevent decompression panels from disengaging from the bilge barriers located in the forward and aft cargo compartments. In the event of a cargo compartment fire, this condition would provide a path for smoke and Halon to enter the flight compartment and passenger cabin, which could result in the inability to contain and extinguish a fire.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Retained Repetitive Inspections, with Revised Service Information and Added Reference to Terminating Action**

This paragraph restates the requirements of paragraph (g) of AD 2016-09-12, with revised service information and an added reference to terminating action: At the applicable time specified in paragraph (g)(1) or (g)(2) of this AD, do a general visual inspection of the bilge barriers located in the forward and aft cargo compartments for disengaged decompression panels, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated

November 16, 2015; or Issue 003, dated December 7, 2016. Repeat the inspection thereafter at the applicable times specified in paragraph 5. "Compliance," of Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated November 16, 2015; or Issue 003, dated December 7, 2016; until the terminating modification required by paragraph (i) of this AD is done. As of the effective date of this AD, only Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 003, dated December 7, 2016, may be used.

(1) For Group 1 airplanes identified in Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated November 16, 2015; or Issue 003, dated December 7, 2016: Inspect within 30 days after May 23, 2016 (the effective date of AD 2016-09-12).

(2) For Group 2 airplanes identified in Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated November 16, 2015; or Issue 003, dated December 7, 2016: Inspect within 180 flight cycles or within 90 days after May 23, 2016 (the effective date of AD 2016-09-12), whichever occurs later.

**(h) Retained Reinstallation of Decompression Panels with Revised Service Information**

This paragraph restates the requirements of paragraph (h) of AD 2016-09-12, with revised service information: If any disengaged decompression panel is found during any inspection required by paragraph (g) of this AD; before further flight, reinstall the panel, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated November 16, 2015; or Issue 003, dated December 7, 2016, as applicable. As of the effective date of this AD, only Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 003, dated December 7, 2016, may be used.

**(i) New Terminating Modification**

Within 36 months after the effective date of this AD: Replace the existing decompression panels of the bilge barriers located in the forward and aft cargo compartments with new decompression panels and adjustable straps (zip ties), in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB500008-00, Issue 001, dated December 7, 2016; except as provided by paragraph (j) of this AD. Accomplishing this modification terminates the repetitive inspections required by paragraph (g) of this AD.

**(j) Exceptions to Service Information**

(1) Where Step 3 of Task 10 of the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB500008-00, Issue 001, dated December 7, 2016, identifies part number (P/N) C412705-577, the correct part number is P/N C412705-575.

(2) Where Step 4 of Task 10 of the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB500008-00, Issue 001, dated December 7, 2016, identifies P/N C412705-575, the correct part number is P/N C412705-577.

**(k) Credit for Previous Actions**

This paragraph provides credit for the actions specified in paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 001, dated November 16, 2015.

**(l) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in

paragraph (m)(1) of this AD. Information may be emailed to:

9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2016-09-12, are approved as AMOCs for the corresponding provisions of paragraphs (g) and (h) of this AD.

(5) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (l)(5)(i) and (l)(5)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled "RC Exempt," then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(m) Related Information**

(1) For more information about this AD, contact Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216<sup>th</sup> Street, Des Moines, WA 98198-6547; phone: 206-231-3570; email: susan.l.monroe@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (n)(3) and (n)(4) of this AD.

**(n) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin B787-81205-SB500008-00, Issue 001, dated December 7, 2016.

(ii) Boeing Alert Service Bulletin B787-81205-SB500009-00, Issue 003, dated December 7, 2016.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216<sup>th</sup> Street, Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on February 21, 2018.

Michael Kaszycki,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.  
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